



Part of



IUCN Canid Specialist Group - Dingo Working Group
Coordinators Dr Ben Allen and Dr Kylie Cairns
Email: benjamin.allen@usq.edu.au and k.cairns@unsw.edu.au

Why conserve the wild New Guinea Dingo?

Other names for the New Guinea Dingo

New Guinea Singing Dog, Singer, *Wanamo*, *Till sa Till*, *Agll Kogllma*.

New Guinea Dingoes are a native species

The New Guinea dingo (NGD) is a unique evolutionary line of Canidae, closely related and possibly ancestral to the Australian dingo (AD). NGDs are endemic to New Guinea and their current known range in the remote mountains is from about 2,000 – 4,700 m elevation. Dating from a recent genetic study indicates the NGD became separated from an ancient Asiatic dog lineage around 10,000-12,000 years ago. The NGD and the Australian dingo, are the purest remaining examples of early primitive dogs, perhaps living relics from the time before pre-agriculture.

The New Guinea Dingo is New Guinea's top terrestrial predator

Since the extinction of the New Guinea thylacine some 5,000 years ago, the NGD has been the largest terrestrial predator on the island, currently restricted to high elevations of the New Guinea mountain corridor. New Guinea has exceptional biodiversity, with high numbers of unique, rare and endemic species, but interactions between these species and the NGD have not been studied. Rare reports of prey remains indicate the NGD preys on echidnas and cuscus. Due to the scarcity of larger prey the NGD undoubtedly takes mostly smaller mammals and birds.

The New Guinea Dingo is culturally important

The NGD plays an important role in the ancient cultures of many indigenous tribes on the island. Tribes differ in their myths and legends, but many consider the NGD to be sacred vessels for their ancestor's spirits, endowed with powers that preserve the lives of people and the forest. There are myths that dingoes brought fire or language to the people, and that the mother spirit of the dingoes advised elders in the past. In Papua New Guinea the tribes own their land and all the animals that live there, so study and conservation of the NGD can only proceed with approval and participation of local landowners.

New Guinea Dingoes are the world's most elusive canid

Field studies of the NGD are difficult due to their remote range in the highlands of New Guinea. As such, very little is known about the wild population, other than the fact that their presence has been confirmed in a few areas in PNG with reported sightings by



Part of



biologists and explorers in the last decade, and one location in Indonesian Papua, their population, range and ecological role is unknown. Locals report that they see and hear fewer NGDs compared to the “old days,” suggesting their populations may be in decline.

The Captive Population

Almost all we know about NGDs has come from the study and observation of the captive population. Approximately 200 highly inbred captive NGDs exist today, descended from a few specimens brought out of Papua New Guinea (1955) (PNG) and Papua Indonesia (1970's). Due to low numbers and extreme inbreeding the captive population is not a viable reservoir for preservation reintroduction, hence the importance of conserving the wild population. From the captives we learned that the NGD has the unique among canids repeat estrus cycles within a defined breeding season like the AD. The NGD has one six month long annual breeding season with females that are not impregnated capable of having two to three complete estrus cycles within that season, although it is unknown if the wild NGDs have the same dingo specific reproductive cycle.

Threats to the New Guinea Dingo

Due to their remote range, above the elevation where permanent human habitation is possible, the NGDs are not in conflict with humans over livestock or territory. Thus, they are not currently subject to control measures. The remoteness, however, makes the study of NGD extremely difficult. As such, little is known about their population, behaviour, and ecological role and this lack is in itself a threat.

One key threat to NGD involves the hybridisation with domestic dogs. The domestic dog population of PNG and Indonesian Papua has grown rapidly in the last few decades, and NGD habitat is being disturbed by ever-increasing levels of exploration for natural resources, deforestation, road building, and mining. The combination of an increased number of domestic dogs around NGD habitat and less undisturbed habitat available will almost certainly result in greatly increased chances of NGDs breeding with domestic dogs and the transmission of disease to the NGD.

Potential Conservation Recommendations

NGD conservation could be as simple as forbidding domestic dogs being taken into areas reserved for NGDs to prevent hybridization. In PNG the local landowners would be recruited caretakers and protect the wild NGDs. For instance, with declared preservation value, funding might be obtained to train local people to administer vaccines to the village dogs near wild dog territory. If the NGD is going to be saved, it must start soon or we will have lost the last remaining chance to study such an isolated pure ancestral-type dog.